

Catalyst system useful for the production of polyolefins, comprises a gel form, crosslinked organic support and a catalyst

Patent Assignee: BASF AG

Inventors: HONG S C; KRISTEN M O; RIEF U

Patent Family

Patent Number	Kind	Date	Application Number	Kind	Date	Week	Type
DE 19941460	A1	20010301	DE 1041460	A	19990831	200136	B

Priority Applications (Number Kind Date): DE 1041460 A (19990831)

Patent Details

Patent	Kind	Language	Page	Main IPC	Filing Notes
DE 19941460	A1		8	C08F-004/02	

Abstract:

DE 19941460 A1

NOVELTY A catalyst system (I) comprises:

- (A) a gel form, cross-linked organic support having an average particle diameter of 1-300 microns;
- (B) a catalyst, appropriate for the polymerization of olefins; and optionally
- (C) at least one activator compound.

DETAILED DESCRIPTION INDEPENDENT CLAIMS are included for:

- (i) a process for the preparation of the catalyst (I) by mixing a swollen, gel-like, cross-linked organic support with a catalyst and optionally an activator at 10-100 degreesC, drying the reaction mixture and optionally washing the product with a solvent that does not swell the support;
- (ii) a process for the polymerization of olefins at 20-300 degreesC and 5-400 bar in the presence of the catalyst system (I).

USE The catalyst system (I) is useful for the production of polyolefins.

ADVANTAGE The catalyst system (I) is simple to prepare, has good activity and results in good polymer particle morphology and does not bleed out.

pp; 8 DwgNo 0/0

Technology Focus:

TECHNOLOGY FOCUS - POLYMERS - Preferred Composition: The support material has a BET

- surface area of less than 10 m²/g and contains 0.5-15 (0.5-7) wt.% cross-linking agent. The support is in the form of spherical particles and is a styrene/divinyl benzene copolymer. The catalyst is a metallocene and the activator is an aluminoxane, dimethylanilinium tetrakis(pentafluorophenyl)borate, triptyl(tetrakis(pentafluorophenyl)borate) or trispentafluorophenylborane.

Preferred Process: The polymerization is carried out in the gas phase, solution or suspension. The olefin is ethene, propene, 1-butene, 1-pentene, 1-hexene, 1-heptene, 1-octene or styrene.

Derwent World Patents Index

© 2002 Derwent Information Ltd. All rights reserved.

Dialog® File Number 351 Accession Number 13852260